

REMARKS

This Preliminary Amendment accompanies a Request for Continued Examination. The Examiner is thanked for the thorough examination of the application. The specification has been amended to improve its language. No new matter is believed to be added to the application by this Amendment.

Status of the Claims

Claims 1-8 are pending in the application. Support for the amendments to claims 1 and 3 can be found in Figures 3D-E and 5D-E and at page 10, lines 2-8 of the specification. Claims 5-6 find support at page 10, lines 4-5 of the specification. Claims 7-8 find support at page 12, line 24 to page 13, line 1 of the specification.

Rejection Under 35 U.S.C. 102(b) Over Nagata

Claims 1-4 remain rejected under 35 U.S.C. 102(b) as being anticipated by Nagata (U.S. Patent No. 6,060,199). Applicant traverses.

The Present Invention And Its Advantages

The present invention pertains to a novel LCD that finds one embodiment in Figure 3E, which is reproduced below.

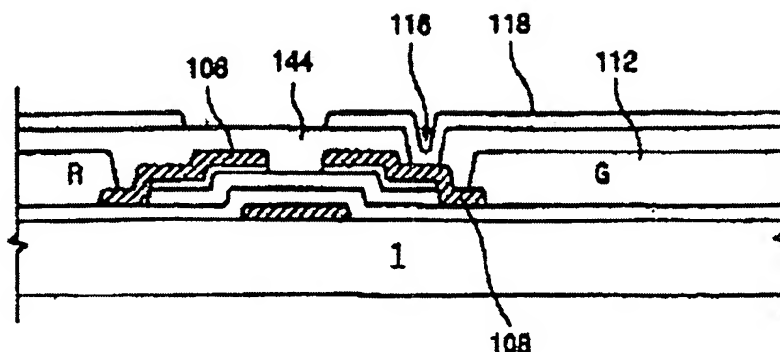


Fig 3E

As shown in Figure 3E, the LCD has a color filter layer R, G overlapping only edge portions of the source and drain 108 so as to prevent light leakage and improve the aperture ratio. The pixel electrode 118 of the LCD contacts the drain through a contact hole 116 in the planarization layer 144.

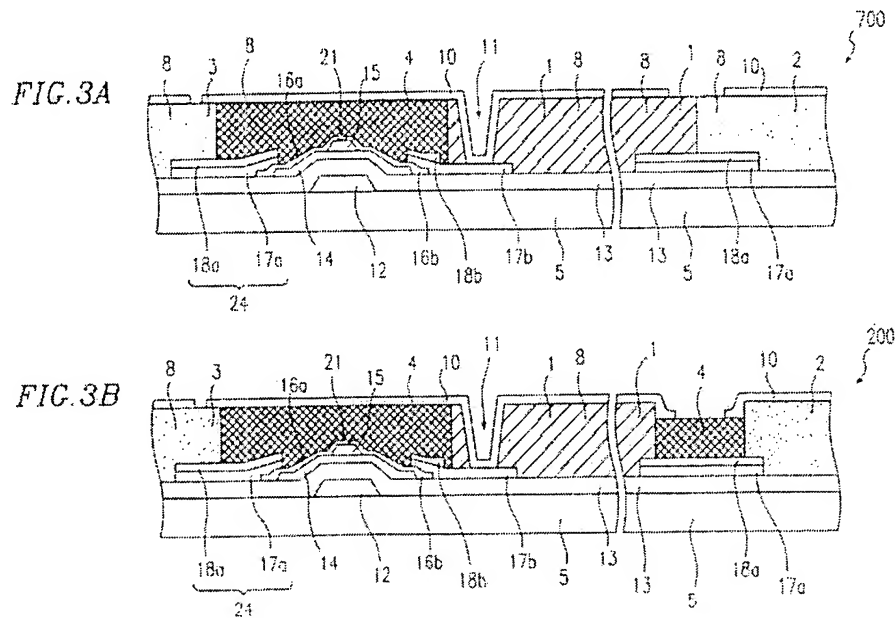
The present invention has many embodiments, and a typical embodiment can be found in claim 1:

1. A liquid crystal display (LCD) device, comprising:
 - a thin film transistor (TFT) formed on a substrate, the TFT having a gate, a source and a drain;
 - a color filter layer on the TFT, and in direct contact with the source and the drain, wherein said contact is only at a portion where said color filter layer is overlapping only edge portions of the source and drain so as to prevent light leakage and improve an aperture ratio;
 - a planarization layer formed over the TFT and the color filter layer, and
 - a pixel electrode formed above the planarization layer and the color filter layer to be in electrical contact with the drain through a contact holed formed in the planarization layer where the color filter layer is not formed.

Independent claim 3 pertains to a method of forming the inventive LCD.

Distinctions Of The Invention Over Nagata

Nagata pertains to a color filter substrate and method for producing the same. At pages 2 and 3 of the Office Action, the Examiner relies upon Figures 3A-B of Nagata, which are reproduced below.



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In Nagata, a black color portion 4 is formed over the TFT structure. The insulative layer 8 and color portions 2, 3 combine with the black color portion 4 to be a color filter layer. The picture element electrode 10 contacts the transparent conductive layer 17b through contact hole 11.

That is, in Nagata the pixel electrode contacts the drain electrode through the drain contact hole in the color filter layer. Nagata fails to disclose or suggest the pixel

electrode contacting the drain electrode through a contact hole located where the color filter layer is not formed.

In comparison, the present invention has the pixel electrode contacting the drain through a contact hole located in the planarization layer. That is, in the present invention the drain contact hole is disposed at a region where the color filter layer is not formed and the pixel electrode contacts the drain electrode through the drain contact hole of the planarization layer. In contrast, Nagata has the drain contact hole disposed in the color filter layer, and the pixel electrode contacts the drain electrode through the contact hole of the color filter layer.

Nagata thus clearly fails to disclose or suggest "a pixel electrode above the planarization layer and the color filter layer to be in electrical contact with the drain through a contact holed formed in the planarization layer where the color filter layer is not formed." (claims 1 and 3 of the present invention). Nagata therefore fails to anticipate claims 1 and 3 of the present invention. Claims depending upon claims 1 or 3 are patentable for at least the above reasons.

This rejection is overcome and withdrawal thereof is respectfully requested.

Information Disclosure Statement

The Examiner is thanked for considering the Information Disclosure Statement filed January 15, 2004 and for making the initialed PTO-1449 form of record in the application in the Office Action mailed November 15, 2004.

Foreign Priority

The Examiner has indicated that he has considered the foreign priority in the parent case in the Advisory Action mailed August 9, 2005.

The Drawings

The Examiner is respectfully requested to indicate whether the drawing figures are acceptable in the next official action.

Conclusion

The Examiner's rejections have been overcome, obviated or rendered moot. No issues remain. The Examiner is accordingly respectfully requested to place the application in condition of allowance and to issue a Notice of Allowability.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Application No. 10/757,521
Amendment dated January 25, 2006
Response to Office Action of October, 27, 2005

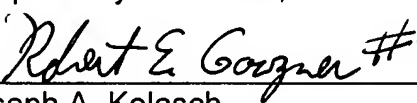
Docket No.: 3430-0200P

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: January 25, 2006



Respectfully submitted,

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